IN THE CLAIMS

1 (Previously Presented). A method comprising:

dividing an input signal into a plurality of time-overlapping windows;

transforming time-overlapping windows so as to create a plurality of frequency-transformed windows;

selecting frequency-transformed windows for processing in accordance with reverberation paths, wherein each of the reverberation paths is associated with a respective delay;

processing the selected ones of the frequency-transformed windows;

adding processed frequency-transformed windows to form a frequency-domain resultant; and

converting the frequency-domain resultant into a time-domain resultant.

Claim 2 (Canceled).

3 (Previously Presented). A method as defined in Claim 1, further comprising:

selecting a frequency-transformed window that incorporates a time shift that is closest to the delay to the reverberation path.

4 (Original). A method as defined in Claim 1, wherein processing selected ones of the frequency-transformed windows comprises applying a first filter that corresponds to a reverberation path.

5 (Original). A method as defined in Claim 4, wherein the first filter effects a frequency-dependent attenuation that corresponds to a respective reverberation path.

6 (Original). A method as defined in Claim 5, wherein processing selected ones of the frequency-transformed windows further comprises applying a head-related transfer function.

7 (Original). A method as defined in Claim 6, wherein the head-related transfer function corresponds to a respective reverberation path.

8 (Original). A method as defined in Claim 7, wherein the head-related transfer function corresponds to positional coordinates of the reverberation path.

9 (Previously Presented). An apparatus comprising:

an input stage to couple to a source of input signals and to divide an input signal into timewise-overlapping windows;

a frequency transform module coupled to the input stage to transform each of the timewise-overlapping windows into a respective frequency-transformed window; and

a processor to select frequency-transformed windows by matching a frequency-transformed window to a source image and to filter each of the selected windows in accordance with a respective filter so as to produce a filtered frequency-transformed window.

Claim 10 (Canceled).

11 (Previously Presented). An apparatus as defined in Claim 9, wherein a source image corresponds to a reverberation path of an audio signal.

12 (Currently Amended). An apparatus as defined in Claim [[10]] 9, further comprising:

a table to store a plurality of transfer functions, each of the transfer functions corresponding to at least one source image.

13 (Original). An apparatus as defined in Claim 12, wherein a source image corresponds to a reverberation path of an audio signal.

14 (Original). An apparatus as defined in Claim 13, wherein each of the transfer functions is a head-response transfer function that corresponds to a reverberation path.

15 (Currently Amended). An apparatus as defined in Claim [[10]] 9, further comprising:

a combiner coupled to the processor to receive a plurality of the frequency-transformed windows and to provide combined windows at an output; and

an inverse frequency transform module coupled to an output of the combiner to transform combined windows into the time domain.

16 (Original). An apparatus as defined in Claim 12, wherein the processor comprises a plurality of source-image processors, wherein each source-image processor:

(i) is coupled to receive a frequency-transformed window that is matched to a respective source image;

(ii) is coupled to the table to receive a transfer function associated with a respective source image; and

(iii) is coupled to receive filter coefficients that correspond to the respective source image.

17 (Previously Presented). An article comprising a machine-readable storage medium containing instructions that, if executed, enable a system to:

divide an input signal into a plurality of time-domain windows;

transform each of the time-domain windows into the frequency domain so as to create a plurality of frequency-transformed windows;

select frequency-transformed windows for processing in accordance with one or more source images;

process the selected ones of the frequency-transformed windows;

combine the processed frequency-transformed windows to form a frequency-domain resultant; and

convert the frequency-domain resultant into a time-domain resultant.

Claim 18 (Canceled).

19 (Previously Presented). An article as defined in Claim 17, further comprising instructions that, if executed, enable the system to select frequency-transformed windows for processing by matching a frequency-transformed window to a delay corresponding to a respective source image.

20 (Original). An article as defined in Claim 18, further comprising instruction that, if executed, enable the system to filter the frequency-transformed window in accordance with parameters that are derived from the source image.

21 (Original). An article as defined in Claim 20, further comprising instructions that, if executed, enable the system to filter the frequency-transformed window in accordance with a Head Response Transfer Function that corresponds to the source image.

22 (Original). A spatial audio rendering engine comprising:

an input stage to divide an input signal into timewise-overlapping windows;

a transform module to transform each of the timewise-overlapping windows into a frequency-transformed window;

a plurality of source image processing kernels, each of the kernels to process a transformed window in accordance with parameters corresponding to a source image; and

an inverse transform module coupled to the source image processing kernels to provide a time-domain signal derived from frequency-transformed windows processed by the processing kernels.

23 (Original). A spatial audio rendering engine as defined in Claim 22, wherein the source image processing kernels are constructed to process selected frequency-transformed windows in accordance with filter functions that correspond to respective ones of the source images.

24 (Original). A spatial audio rendering engine as defined in Claim 23, further comprising a plurality of Head Related Transfer Functions to selectably coupled to respective ones of the source image processing kernels for filtering a transformed windows in a manner that simulates the response of a human ear to the respective source image provided to an audio display device.

25 (Original). A spatial audio rendering engine as defined in Claim 23, wherein source image processing kernels are constructed to process frequency-transformed windows that are time-delay matched to respective source images.

26 (Original). A spatial audio rendering engine as defined in Claim 25, further comprising:

a signal combiner coupled to outputs of source image processing kernels to provide an output window representing a combination of the outputs of the source image processing kernels.

27 (Original). A spatial audio rendering engine as defined in Claim 26, further comprising:

an inverse transform module coupled to the signal combiner to transform the output window signal to a time-domain signal.

28 (Original). A spatial audio rendering engine as defined in Claim 27, further comprising:

an interleave module coupled to the inverse transform module to provide an output signal to an audio display device.

29 (Previously Presented). A system comprising:

a spatial audio rendering engine comprising:

an input stage to couple to a source of input signals and to divide an input signal into timewise-overlapping windows;

a frequency transform module coupled to the input stage to transform each of the timewise-overlapping windows into a respective frequency-transformed window; and

a processor to select frequency-transformed windows and to filter each of the selected frequency-transformed windows in accordance with a respective filter so as to produce a filtered frequency-transformed window processed in accordance with one or more source images; and

an audio display device.

30 (Original). A system as defined in Claim 29, further comprising:

a buffer coupled to the frequency transform module to store respective ones of the frequency-transformed windows.